Kehao Zhang

List of Publications by Year
in descending order

38 papers	2,452 citations	377584 21 h-index	355658 38 g-index
40 all docs	40 docs citations	40 times ranked	5547 citing authors

#	ARTICLE	IF	CITATIONS
1	Acquisition and analysis of scanning tunneling spectroscopy dataâ€"WSe2 monolayer. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, .	0.9	5
2	0D Nanocrystals as Lightâ€Driven, Localized Chargeâ€Injection Sources for the Contactless Manipulation of Atomically Thin 2D Materials. Advanced Photonics Research, 2021, 2, 2000151.	1.7	9
3	Tuning Transport and Chemical Sensitivity via Niobium Doping of Synthetic MoS₂. Advanced Materials Interfaces, 2020, 7, 2000856.	1.9	19
4	Flat Bands and Mechanical Deformation Effects in the MoirÃ© Superlattice of MoS₂-WSe₂ Heterobilayers. ACS Nano, 2020, 14, 7564-7573.	7.3	38
5	Light-Driven Permanent Charge Separation across a Hybrid Zero-Dimensional/Two-Dimensional Interface. Journal of Physical Chemistry C, 2020, 124, 8000-8007.	1.5	14
6	Quality enhancement of low temperature metal organic chemical vapor deposited MoS₂: an experimental and computational investigation. Nanotechnology, 2019, 30, 395402.	1.3	6
7	Doping of Two-Dimensional Semiconductors: A Rapid Review and Outlook. MRS Advances, 2019, 4, 2743-2757.	0.5	29
8	FeSx-graphene heterostructures: Nanofabrication-compatible catalysts for ultra-sensitive electrochemical detection of hydrogen peroxide. Sensors and Actuators B: Chemical, 2019, 285, 631-638.	4.0	18
9	A roadmap for electronic grade 2D materials. 2D Materials, 2019, 6, 022001.	2.0	205
10	Probing the origin of lateral heterogeneities in synthetic monolayer molybdenum disulfide. 2D Materials, 2019, 6, 025008.	2.0	6
11	2D Materials: Tuning the Electronic and Photonic Properties of Monolayer MoS2 via In Situ Rhenium Substitutional Doping (Adv. Funct. Mater. 16/2018). Advanced Functional Materials, 2018, 28, 1870105.	7.8	1
12	Tuning the Electronic and Photonic Properties of Monolayer MoS₂ via In Situ Rhenium Substitutional Doping. Advanced Functional Materials, 2018, 28, 1706950.	7.8	137
13	Quantum-Confined Electronic States Arising from the MoirÃ© Pattern of MoS₂â€"WSe₂ Heterobilayers. Nano Letters, 2018, 18, 1849-1855.	4.5	91
14	Realizing Large-Scale, Electronic-Grade Two-Dimensional Semiconductors. ACS Nano, 2018, 12, 965-975.	7.3	172
15	Large scale 2D/3D hybrids based on gallium nitride and transition metal dichalcogenides. Nanoscale, 2018, 10, 336-341.	2.8	38
16	Considerations for Utilizing Sodium Chloride in Epitaxial Molybdenum Disulfide. ACS Applied Materials & Interfaces, 2018, 10, 40831-40837.	4.0	58
17	Multiscale framework for simulation-guided growth of 2D materials. Npj 2D Materials and Applications, 2018, 2, .	3.9	41
18	Large-Area, Single-Layer Molybdenum Disulfide Synthesized at BEOL Compatible Temperature as Cu Diffusion Barrier. IEEE Electron Device Letters, 2018, 39, 873-876.	2.2	22

#	ARTICLE	IF	CITATIONS
19	Van der Waals interfaces in epitaxial vertical metal/2D/3D semiconductor heterojunctions of monolayer MoS₂and GaN. 2D Materials, 2018, 5, 045016.	2.0	21
20	Order of magnitude enhancement of monolayer MoS2 photoluminescence due to near-field energy influx from nanocrystal films. Scientific Reports, 2017, 7, 41967.	1.6	15
21	Selective-area growth and controlled substrate coupling of transition metal dichalcogenides. 2D Materials, 2017, 4, 025083.	2.0	36
22	Stability of semiconducting transition metal dichalcogenides irradiated by soft X-rays and low energy electrons. Applied Physics Letters, 2017, 110, 173102.	1.5	4
23	Properties of synthetic epitaxial graphene/molybdenum disulfide lateral heterostructures. Carbon, 2017, 125, 551-556.	5.4	27
24	Defect passivation of transition metal dichalcogenides via a charge transfer van der Waals interface. Science Advances, 2017, 3, e1701661.	4.7	95
25	Structural and electrical analysis of epitaxial 2D/3D vertical heterojunctions of monolayer MoS2 on GaN. Applied Physics Letters, 2017, 111, .	1.5	27
26	Selective Chemical Response of Transition Metal Dichalcogenides and Metal Dichalcogenides in Ambient Conditions. ACS Applied Materials & Interfaces, 2017, 9, 29255-29264.	4.0	24
27	Deconvoluting the Photonic and Electronic Response of 2D Materials: The Case of MoS2. Scientific Reports, 2017, 7, 16938.	1.6	23
28	2D materials advances: from large scale synthesis and controlled heterostructures to improved characterization techniques, defects and applications. 2D Materials, 2016, 3, 042001.	2.0	408
29	Formation of hexagonal boron nitride on graphene-covered copper surfaces. Journal of Materials Research, 2016, 31, 945-958.	1.2	17
30	Electric-Field-Assisted Directed Assembly of Transition Metal Dichalcogenide Monolayer Sheets. ACS Nano, 2016, 10, 5006-5014.	7.3	9
31	Photoluminescence of monolayer transition metal dichalcogenides integrated with VO₂. Journal of Physics Condensed Matter, 2016, 28, 504001.	0.7	10
32	First principles kinetic Monte Carlo study on the growth patterns of WSe ₂ monolayer. 2D Materials, 2016, 3, 025029.	2.0	59
33	Vertical 2D/3D Semiconductor Heterostructures Based on Epitaxial Molybdenum Disulfide and Gallium Nitride. ACS Nano, 2016, 10, 3580-3588.	7.3	207
34	Synthesis of two-dimensional materials for beyond graphene devices. Proceedings of SPIE, 2015, , .	0.8	1
35	Two-dimensional materials for low power and high frequency devices. Proceedings of SPIE, 2015, , .	0.8	0
36	Large-area synthesis of WSe ₂ from WO ₃ by seleniumâ€“oxygen ion exchange. 2D Materials, 2015, 2, 014003.	2.0	37

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37	Freestanding van der Waals Heterostructures of Graphene and Transition Metal Dichalcogenides. ACS Nano, 2015, 9, 4882-4890.	7.3	157
38	Manganese Doping of Monolayer MoS₂: The Substrate Is Critical. Nano Letters, 2015, 15, 6586-6591.	4.5	357